

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

KYLE GLENN CROSS

Group Art Unit: Unknown

Examiner: Unknown

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For: DECORATIVE TRANSFER PROCESS

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PRELIMINARY AMENDMENT

Commissioner for Patents
United States Patent and Trademark Office
Washington, D.C. 20231

Sir:

Prior to examination on the merits, kindly amend the application as follows:

Kindly cancel claims 1 - 15 in favor of new claims 16 - 33.

In The Claims

16. (New) A process for the transfer of a graphics image to a fabric substrate, said process comprising:

- (a) providing a computer-readable file corresponding to said graphics image;
- (b) inputting said computer-readable file to an ink-jet printer, said printer containing at least one ink cartridge containing a fusible polymer ink;
- (c) printing said design onto a substrate optionally coated with a release coating, but free of fusible polymer, to form a graphics image-containing surface with ink from said at least one ink cartridge; and

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(d) contacting said graphics image-containing surface with a textile article under sufficient heat and pressure to transfer said graphics image to said textile material, such that a graphics image-containing fabric substrate is produced, wherein said fabric has the same hand and feel after printing as before printing in areas outside the graphics image.

17. (New) The process of claim 16 wherein said ink comprises a vinyl plastisol ink.

18. (New) The process of claim 16, wherein said fabric substrate is a fabric garment.

19. (New) The process of claim 18, wherein said article of clothing is a T-shirt.

20. (New) The process of claim 16, where there is no polymer transferred from said graphics image-containing surface other than said graphics image itself.

21. (New) The process of claim 16, wherein said substrate is coated with a non-fusible polymer release coating.

22. (New) The process of claim 21, wherein said release coating comprises a silicone coating.

23. (New) The process of claim 16, wherein said substrate comprises, non-release coated paper.

24. (New) A transfer containing a graphics image suitable for transfer onto a fabric garment by application of heat and pressure by the process of claim 16, said transfer comprising:

(a) a planar substrate, optionally coated with a non-fusible release coating, and free of fusible polymer;

(b) a graphics image consisting essentially of an optionally dried fusible polymer ink, said graphics image printed onto said substrate by means of an ink-jet printer containing at least one ink-jet cartridge containing said fusible polymer ink, said printer controlled by a computer-readable graphics file input to said printer, said graphics image printed onto one surface of said substrate, said transfer containing no fusible polymer other than the fusible polymer of said fusible polymer ink.

25. (New) The transfer of claim 24, wherein said substrate comprises paper with no polymeric coating.

26. (New) The transfer of claim 24, wherein said substrate comprises a plastic film.

27. (New) The transfer of claim 24, wherein said substrate comprises a release coated paper.

28. (New) The transfer of claim 24, wherein said fusible polymer ink comprises a vinyl plastisol ink.

29. (New) A method for producing a point of sale transfer printed fabric garment by the process of claim 16, said method comprising:

(a) scanning a photograph or graphics imagery supplied by a customer with a scanner to produce a computer readable file, or accepting a CD-ROM or other computer readable file from a customer;

(b) supplying said computer readable file to an ink-jet printer containing cartridges of fusible polymer ink;

(c) printing a graphics image from said computer readable file by said printer onto a substrate free from fusible polymer, to form a fusible polymer ink graphics image on a surface of said substrate;

(d) positioning said graphics image adjacent a surface of said fabric garment and applying sufficient heat and pressure to transfer said graphics image to said fabric garment and fuse the polymer particles of said fusible polymer ink; and

(e) delivering a graphics image-containing fabric garment to said customer.

30. (New) The process of claim 29 wherein said substrate is paper free of release coating.

31. (New) The process of claim 29, wherein said substrate is release coated paper.

32. (New) The process of claim 29, wherein said substrate is a plastic film.

33. (New) The process of claim 29, wherein said photograph or graphics imagery is in color, and said graphics image on said fabric garment is also in color.

Remarks

The previously pending claims have been cancelled. New claims 16 - 33 have been added, and find full support in the specification as filed.

The Board has maintained the rejection of the claims over *Ishii*. The new claims have been formulated with *Ishii* and the Board's decision in mind. *Ishii* discloses a transfer suitable for manufacturing patterned vinyl flooring by coating a release-coated substrate with a foamable, fusible polymer, and optionally printing an ink design over the foamable fusible polymer.

The present invention is directed to the preparation of graphics-containing fabric garments by preparing a transfer by printing a design onto a substrate free of fusible polymer by supplying an ink-jet printer with a computer readable graphics file and printing the graphic image onto the substrate using fusible polymer ink. The transfer is then placed adjacent the garment and the image transferred by application of heat and pressure. By specifying that the substrate is free of fusible polymer, the fabric surrounding the applied image will have the same hand and feel as it did before the printing operation.

Ishii is directed to manufacture of vinyl flooring having a textured pattern. Each and every one of *Ishii*'s "transfers" contains a foamable (and therefore fusible) polymer pattern applied prior to printing the ink pattern. The foamable polymer fuses and foams when heated following application to the flooring substrate. *Ishii* discloses no fusible polymer ink except that which contains the blowing agent for producing the foamed pattern. However, such inks are very viscous due to the presence of the blowing agent. At column 4, lines 28 - 29, the foamable ink is taught to be of 500 to 7000 centipoise viscosity, far too viscous to be printed from an ink-jet printer.

Applicant finds absolutely no disclosure of any fusible polymer ink in any of the remaining disclosure of *Ishii*. Since Applicant's claims require their substrate to be free of fusible polymer prior to printing the graphics image and as *Ishii* teaches that a foamable

pattern must be laid down onto the substrate prior to printing his graphics image (4), the subject claims are clearly patentable over *Ishii*, whether alone or in combination with any other reference known to Applicant.

Further, as the only ink which contains a fusible polymer is *Ishii's* foamable polymer ink, as *Ishii* does not teach or suggest using any other fusible polymer- containing ink, as *Ishii* is not directed to applying graphics to fabric garments or to any problems related thereto, and as *Ishii's* only polymer ink is incapable of being printed by means of an ink-jet printer, one skilled in the art would be motivated by *Ishii* to produce a graphic suitable for application to fabric garments which graphic employs a fusible polymer ink printed from an ink-jet printer.

Applicant respectfully submits that the present claims are allowable, and respectfully requests a Notice to that effect.

Respectfully submitted,
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By 

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